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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/552,550	10/12/2005	Wilhelmus Christianus Maria Lohbeck	TSG317US	6662
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SHELL OIL COMPANY				
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EXAMINER				
ANDREWS, DAVID L				
ART UNIT		PAPER NUMBER		
3672				
MAIL DATE		DELIVERY MODE		
07/30/2008		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary****Application No.**

10/552,550

**Applicant(s)**LOHBECK, WILHELMUS  
CHRISTIANUS MARIA**Examiner**

David Andrews

**Art Unit**

3672

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 20 November 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 October 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

The amendment filed 11/20/2007 has been entered.

### ***Response to Arguments***

Applicant's arguments filed 10/22/2007 have been fully considered but they are not persuasive. Applicant argues that the disclosure of Johnson is not related to the field of invention and therefore the combination is improper. The examiner disagrees. Johnson is concerned with expandable device for a flow line, which include a packer which is a type of plug (col. 3, lines 14-17). Although a packer would not be a "pump plug", the disclosure of Johnson is considered relevant since its teachings are for surfaces which sealingly engage an interior of a flow line. The ability of any device of Johnson to allow flow through the assembly is not considered relevant since it is only the surface engaging structures which are relied on. The teachings are further considered relevant since the flexible cage as taught by Johnson is designed to allow flexibility and expansion, and the plug of Girard warrants these qualities (col. 2, lines 33-57, col. 4, lines 26-42).

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Girard (US 3,605, 159). Girard discloses a pump plug for flowline operations comprising: a resilient body (10) and a flexible cage (14) having a wear resistant outer surface (col. 2, lines 53-57) arranged around the resilient body (fig 2 or fig 3); the flexible cage comprising a tube having a first end and a second end; the tube being provided with a repeating pattern of bars (strips of 14 figs 2) and longitudinal slits (cut out portions see in fig 2 which do extend longitudinally), wherein said slits are each closed at at least one end (slits are closed at both ends) and prevent fluid from flowing along the resilient body while allowing said bars to displace into said resilient body (fig 1 shows displacement of bars into the body).

***Claim Rejections - 35 USC § 103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 2, 3 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Girard in view of Johnson et al. (US 7,086,476). Girard discloses all the limitations of these claims as applied to claim 1 above and including the repeating pattern as extended in an axial direction with its mirror image (figs 3, 9, 11), except for a repeating pattern of two slits closed at different ends and longitudinally overlapping or a pattern of three slits with one closed at both ends and the other two closed on an inside portion and longitudinally aligned. Johnson et al. disclose a wellbore device for sealing engagement with a flowline comprising a flexible cage (30) comprising a repeating

pattern of slits (figs 2-7) comprising a first, second and third slit, wherein the first slit is closed at both ends of the tube, wherein the third slit is aligned with the second slit, and wherein the second and third slit are open at opposite ends of the tube and closed in the middle (figs 2 or 3); and a pattern comprising two slits, a first closed at a first end and open at the second end, and a second slit closed at the second end and open at the first, where the slits overlap longitudinally (fig 5). It would have been obvious to one of ordinary skill in the art at the time of invention to try the flexible cage patterns as taught by Johnson et al. on the device of Girard, since choosing from a finite number of identified predictable solutions (i.e. for a flexible cage for engaging a flowline around a resilient expanded member) with a reasonable expectation of success involves only routine skill in the art. (See MPEP 2141 III, exemplary rationale E).

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Girard in view of Knapp et al. (US 3,725,968). Girard discloses all the limitations of claim 4, as applied to claim 1 above, except for a rigid core. Knapp et al. disclose a plug comprising: a resilient body comprising a rigid core (34; col. 3, lines 31-35) surrounded by a mantle of resilient material (28; col. 2, lines 31-33). It would have been obvious to one of ordinary skill in the art at the time of invention to utilize a rigid core, as taught by Knapp et al. with the device of Girard in order to provide structural support to prevent unduly deformation or breaking of the plug under high pressure stress (col. 3, lines 31-44).

***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Andrews whose telephone number is (571)272-6558. The examiner can normally be reached on Monday-Thursday, 7:30am-5pm and alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bagnell can be reached on (571) 272-6999. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3672

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/David J. Bagnell/  
Supervisory Patent Examiner, Art Unit 3672

DLA  
7/23/08